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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

09/820,966

**Applicant(s)**

BROUK ET AL.

**Examiner**

LAN-DAI Thi TRUONG

**Art Unit**

2452

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 3-10, 17-79 and 84-85 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-10, 17-79, 84 and 85 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/15/2008 has been entered.

2. This action is response to communications: application, filed on 03/30/2001; amendment filed on 10/15/2008. Claims 1, 3-10, 17-79 and 84-85 are pending; claims 84-85 are added; claims 2, 11-16 are canceled; claims 80-83 are withdrawn.

3. The applicant's arguments filed on 10/15/2008 have fully considered but they are moot in view with new ground for rejections.

### **Specification Objection**

The specification is objected to because of the following informalities: missing provisional application numbers (in paragraph [1001]). An appropriate correction is required.

### **Response to arguments**

1. The previous Specification Objection (issued on 04/16/2008) is withdrawn responding to applicant's arguments to the 'Objection to Specification' with respect to "machine-readable medium" is referred to appropriate manufactures those are structurally and functionally

interconnected with a program in a manner which enables the program to act as a computer component and realize its functionality.

2. Regarding applicant's arguments with respect to the Claim Rejections under 35 USC § 112 (issued on 04/16/2008) are not persuasive; the claim rejections under 35 USC § 112 are retained.

3. Regarding applicant's arguments to claim 32 with respect to Owen does not disclose figure of "a message interchange network built on an open platform" are not persuasive. This feature clearly taught by Stewart et al. (U.S. 2002/0019797). Stewart discloses an open collaborative commerce platform for dynamic business-to-business collaborations, therefrom messages are communicated between trading partners (Stewart, [0024]; [0060]; [0084]).

4. Regarding applicant's arguments to claim 32 with respect to Johnson does not teach feature of "path determining being based on an evaluation of two or more routing scripts selected from the group consisting of: a routing script defined by a sending service, a routing script defined by a recipient service, and one or more routing scripts defined by one or more in-transit services, such that each service is capable of independently affecting said determining of said route path during a logical routing of said message represented by said evaluation" are not persuasive; Johnson discloses a communication system therefrom each system user/ or caller is authorized to access an administration workstation to define routing script for a call service. The routing engine then determines an appropriate destination for the call service based upon evaluating the user-generated routing scripts (Johnson, abstract; column 1, line 4, 63-67; column 2, lines 26-47; column 3, lines 45-52; column 5, lines 1-27).

**Claim rejections-35 USC § 112, first paragraph**

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

**Claims 1, 3-10, 17-79, 84-85 are rejected under 35 USC § 112 first paragraph as failing to comply with written description requirements.**

**Regarding claim 1:**

The claim(s) contains subject matter (e.g. ...two or more routing scripts selected from the group consisting of: routing script defined by a sending service, routing script defined by recipient service, and one or more routing scripts defined by one or more in-transit services), which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. At first, the specification fails to support for claim feature of 'group consisting of: routing script defined by a sending service, routing script defined by recipient service, and one or more routing scripts defined by one or more in-transit services.' Nowhere in the specification discloses the use of 'any group which consisting of: routing script defined by a sending service, routing script defined by recipient service, and one or more routing scripts defined by one or more in-transit services.' Although, applicant admits that (e.g. '*routing scripts that are pre-defined by the sending service, recipient service or any in transit service*' and '*the routing path may thus be determined based upon routing scripts specified by all services that may interact with particular message*' (see, the Remark page 15, lines 12-16, 18-19)); however,

applicant's admissions does not reflect claim feature of a 'group which consisting of: routing script defined by a sending service, routing script defined by recipient service, and one or more routing scripts defined by one or more in-transit services.' Second, nowhere in the specification discloses the use of how to select two or more routing scripts from the group of routing scripts. The specification fails to provide selection conditions and descriptive processes those would be applied on two or more routing scripts so that they can be selected from the group of routing scripts. Without disclosures the use of a routing scripts group which consists of: routing script defined by a sending service, routing script defined by recipient service, and one or more routing scripts defined by one or more in-transit services); and the uses of how to select two or more routing scripts from the group routing scripts; how would one of ordinary skill in the art determine claim feature of "determining a route path for delivery of said message to said one or more recipient services, said route path including one or more in-transit services, said determining being based on an evaluation of two or more routing scripts selected from the group consisting of: a routing script defined by a sending service, a routing script defined by a recipient service, and one or more routing scripts defined by one or more in-transit services, such that each service is capable of independently affecting said determining of said route path during a logical routing of said message represented by said evaluation." The appropriate corrections are required.

**Regarding claim 3-10, 17-79, 84-85:**

Those claims are rejected under rationale of claim 1.

**Regarding claim 84:**

The claim(s) contains subject matter (i.e. ..., the independent processing being selected from a group including data transformation, content modifying, filtering and service utilization tracking)" which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Nowhere in the specification discloses the use of in-transit service conduct independent processing of message, wherein the independent processing being selected from a group including data transformation, content modifying, filtering and service utilization tracking. Application only mentions about the use of a message interchange network (150) that enables SMEs 110-m, webware ASPs 120-n, and in-transit processors (ITPs) 130-p to connect to one another. The ITPs 130-p are operative to process messages that are in-transit from a sender to a recipient. ITPs 130-p can be designed to perform a variety of functions such as data transformation, enrichment, cross-reference ID mapping, filtering, credit scoring, or the like (see, specification, [1019]). Without disclosures the uses of in-transit service conduct independent processing of message, wherein the independent processing being selected from a group including data transformation, content modifying, filtering and service utilization tracking from the specification; how would one of ordinary skill in the art determine claim limitation of "....one or more of said in-transit services conduct independent processing of said message as said message travels from a sending server to a recipient service, the independent processing being selected from a group including data transformation, content modifying , filtering and service utilization tracking." The appropriate corrections are required.

**Regarding claim 85:**

This claim is rejected under rationales of claim 84.

### **Claim rejections-35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1, 3-9, 17-25, 27-29, 31-34, 37-47, 49-55, 60-69, 74-79 and 84-85 are rejected under 35 U.S.C 103(a) as being un-patentable over Stewart et al. (U.S. 2002/0019797) in view of Johnson et al. (U.S. 6,665,393).**

#### **Regarding claim 1:**

Stewart discloses the invention substantially as claimed, including a method, which can be implemented in a computer hardware or software code for routing messages from one or more sending services to one or more recipient services across a message interchange network, said message interchange network being built on an open platform overlaying a public network, wherein at least some of the one or more sending services and the one or more recipient services are managed by different organizational entities, and wherein each sending service and recipient service is accessible according to properties and permissions associated with each of the sending services and recipient services, comprising:

receiving a message from a sending service, said message including a header element and at least one of: a body element including one or more documents that a sending service is sending to a recipient service, and an attachment including one or more documents that a sending



service is sending to a recipient service: (Stewart discloses an open collaborative commerce platform for dynamic business-to-business collaborations, therefrom messages are communicated between trading partners. Although Stewart does not explicitly disclose message header, message body, however those are inherently included in the communication message: abstract, lines 7-14; [0030]; [0060]; [0084]).

determining a route path for delivery of said message to said one or more recipient services: (c-hub, included in a collaboration server, which implements as router is capable of determining and routing the messages to the appropriate recipients: Stewart: [0081]; [0066]; [0079]; [0080]; [0093]-[0105]; [0115]-[0116]).

route path including one or more in-transit services; delivering said message to an in-transit service in said route path; wherein said in-transit service performs an identifiable operation on said message as said message travels from a sending service to a recipient service, the identifiable operation altering the content of the message to ensure that the message has the proper format for the recipient service: (all messages communicated between trading partners would be transmitted over an in-transit services (e.g. c-bridge, gateway, Proxy) those are capable of receiving message transmitted from one c-space, transforming the received message into format of second c-space, and publish the transformed message to the second c-space: Stewart, figure 22, items 424, 426, 428; [0274]-[0276]; [0233]; [0140]).

However, Stewart does not explicitly disclose the determining being based on an evaluation of two or more routing scripts selected from the group consisting of: a routing script defined by a sending service, a routing script defined by a recipient service, and one or more routing scripts defined by one or more in-transit services, such that each service is capable of

independently affecting said determining of said route path during a logical routing of said message represented by said evaluation.

In analogous art, Johnson discloses a communication system which allows each system user/caller to access an administration workstation to define routing script which includes routing instructions. The routing engine then determines an appropriate destination for call service based upon evaluating the user-generated routing scripts (Johnson, abstract; column 1, line 4, 63-67; column 2, lines 26-47; column 3, lines 45-52; column 5, lines 1-27).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Johnson's ideas of determining an appropriate destination for a call service based upon evaluating user-generated routing scripts into Stewart's system in order to provide an efficient message routing control system (e.g. increasing flexibilities by providing users ability of modifying routing scripts; decreasing time consuming), see (Johnson, column 2, lines 49-60).

**Regarding claim 3:**

In addition to rejection in claim 1, Stewart-Johnson further discloses header element is an extensible markup language header element: (Stewart, abstract, lines 7-14; [0030]; [0060]; [0084]).

**Regarding claims 4-7:**

In addition to rejection in claim 1, Stewart-Johnson further discloses documents in body element and one or more documents can accommodate any type of data: (Stewart, abstract, lines 7-14; [0030]; [0060]; [0084]).

**Regarding claim 8:**

In addition to rejection in claim 1, Stewart-Johnson further discloses message includes routing and route trace elements: (Stewart, [0030]; [0060]; [0084]).

**Regarding claim 17:**

Stewart-Johnson discloses a method as discuss in claim 1, which includes recursively determining: (Johnson: abstract; column 4, lines 60-67; column 5, lines 1-27).

**Regarding claims 18-20:**

Stewart-Johnson discloses a method as discuss in claim 1, which includes determining occurs prior to physical delivery of message: (Johnson discloses method of determining and addressing desired destination for the call by executing routing scripts those are generated by the administration station and cooperated with customer-generated call routing scripts. As one of ordinary skill in the art would know that path determining should be processed prior actual physical delivering of message: abstract; column; column 4, lines 60-67; column 5, lines 1-27).

**Regarding claims 21-22:**

Stewart-Johnson discloses a method as discuss in claim 1, which includes a routing script defines a procedure based on pattern matching: (Johnson, abstract; column 4, lines 60-67; column 5, lines 1-27).

**Regarding claim 23-25:**

Stewart-Johnson discloses a method as discuss in claim 1, which includes routing scripts based on routing rules: (Johnson: column 5, lines 1-20).

**Regarding claims 27-28 and 31:**

Those claims are rejected under rationale of claim 1.

**Regarding claim 29:**

Stewart-Johnson discloses a method as discuss in claim 1, which includes delivering message to said in-transit service for one of data transformation operation, an enrichment operation, a cross-reference ID mapping operation, a filtering operation, and a credit scoring operation: (The created c-space is capable of receiving and sending message between communication participants (Stewart, [0025]-[0027]; [0030]). In Stewart's system, selecting c-space for communication between participants based upon business protocol of incoming message (Stewart, [0098]).

**Regarding claim 9:**

Stewart-Johnson discloses a method as discuss in claim 1, which includes the simple object access protocol (SOAP): (Stewart discloses a system wherein communications can implement over SOAP: [0338]).

**Regarding claim 32:**

Stewart discloses the invention substantially as claimed, including a system, which can be implemented in a computer hardware or software code for message routing, comprising:

a message routing network built on an open platform overlaying a public network, said message routing network enabling routing of message between a sending service and one or more recipient services, wherein at least some of the one or more sending service and the one or more recipient services are managed by different organizational entities: (Stewart discloses an open collaborative commerce platform for dynamic business-to-business collaborations, therefrom messages are communicated between trading partners: abstract, lines 7-14; [0024]; [0030]; [0060]; [0084]).

enabling inclusion of a plurality of in-transit service into said message routing network; a route path defining delivery of said message to said one or more recipient services; said route path including one or more of the in-transit services: (the collaboration spaces (c-space) are created by c-space owners (e.g. message sender/message receiver). The created c-space is capable of receiving and sending message between communication participants (Stewart, [0025]-[0027]; [0030]); where ("c-space" reads on 'in-transit service' as claimed).

an in-transit service can be selectively included in routing for a message based upon an identifiable type of processing that said in-transit service can perform on said message: (selecting c-space for communication between participant based upon business protocol of incoming message: Stewart, [0098])

However, Stewart does not explicitly disclose path determining being based on an evaluation of two or more routing scripts selected from the group consisting of: a routing script defined by a sending service, a routing script defined by a recipient service, and one or more routing scripts defined by one or more in-transit services, such that each service is capable of independently affecting said determining of said route path during a logical routing of said message represented by said evaluation.

In analogous art, Johnson discloses a communication system which allows each system user/caller to access an administration workstation to generate routing script which includes routing instructions. The routing engine then determines an appropriate destination for call service based upon evaluating the user-generated routing scripts (Johnson, abstract; column 1, line 4, 63-67; column 2, lines 26-47; column 3, lines 45-52; column 5, lines 1-27).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Johnson's ideas of determining an appropriate destination for a call service based upon evaluating user-generated routing scripts into Stewart's system in order to provide an efficient message routing control system (e.g. increasing flexibilities by providing users ability of modifying routing scripts; decreasing time consuming), see (Johnson, column 2, lines 49-60).

**Regarding claim 33:**

Stewart-Johnson discloses a method as discuss in claim 32, which includes discloses delivering said message to said in-transit service for one of data transformation operation, an enrichment operation, a cross-reference ID mapping operation, a filtering operation, and a credit scoring operation: (Stewart, [0025]-[0027]; [0030]). In Stewart's system, selecting c-space for communication between participants based upon business protocol of incoming message: Stewart, [0098]).

**Regarding claim 34:**

Stewart-Johnson discloses a method as discuss in claim 32, which includes an in-transit service is included in routing based on routing script: (Johnson: column 5, lines 1-20).

**Regarding claim 50:**

Stewart-Johnson discloses a method as discuss in claim 32, which includes message is delivered to recipient service after said message has been routed to all in-transit services in route path: (the collaboration spaces (c-space) are created by c-space owners (e.g. message sender/message receiver). The created c-space is capable of receiving and sending message

between communication participants (Stewart, [0025]-[0027]; [0030]); where (“c-space” reads on ‘in-transit service’ as claimed).

**Regarding claim 49:**

Stewart-Johnson discloses a method as discuss in claim 32, which further includes transport level message service: (Stewart: [0061]).

**Regarding claim 37:**

Stewart-Johnson discloses a method as discuss in claim 34, which includes route path is defined by the in-transit service: (Johnson, abstract; column; column 4, lines 60-67; column 5, lines 1-27).

**Regarding claim 38:**

This claim is rejected under rationale of claim 32.

**Regarding claim 39-42:**

Stewart-Johnson discloses a method as discuss in claim 34, which includes routing is determined recursively, during logical and prior to physical delivery of message: (Johnson: abstract; column; column 4, lines 60-67; column 5, lines 1-27).

**Regarding claims 43-44:**

Stewart-Johnson discloses a method as discuss in claim 34, which includes a routing script defines a procedure based on pattern matching: (Johnson, abstract; column 4, lines 60-67; column 5, lines 1-27).

**Regarding claim 45-47:**

Stewart-Johnson discloses a method as discuss in claim 34, which includes routing scripts based on routing rules: (Johnson: column 5, lines 1-20).

**Regarding claim 51:**

Stewart discloses the invention substantially as claimed, including a computer program product, stored on a machine-readable medium, for routing messages from one or more sending services to one or more recipient services across a message interchange network, said message interchange network being built on an open platform overlaying a public network, wherein at least some of the one or more sending services and the one or more recipient services are managed by different organizational entities, and wherein each sending service and recipient service is accessible according to properties and permissions associated with each of the sending services and recipient services, comprising instructions operable to cause a computer to:

receiving a message from a sending service, said message including a header element and at least one of: a body element including one or more documents that a sending service is sending to a recipient service, and an attachment including one or more documents that a sending service is sending to a recipient service: (Stewart discloses an open collaborative commerce platform for dynamic business-to-business collaborations, therefrom messages are communicated between trading partners. Although Stewart does not explicitly disclose message header, message body, however those are inherently included in the communication message: abstract, lines 7-14; [0030]; [0060]; [0084]).

determining a route path for delivery of said message to said one or more recipient services: (c-hub, included in a collaboration server, which implements as router is capable of determining and routing the messages to the appropriate recipients: Stewart: [0081]; [0066]; [0079]; [0080]; [0093]-[0105]; [0115]-[0116]).



route path including one or more in-transit services; delivering said message to an in-transit service in said route path; wherein said in-transit service performs an identifiable operation on said message as said message travels from a sending service to a recipient service, the identifiable operation altering the content of the message to ensure that the message has the proper format for the recipient service: (all messages communicated between trading partners would be transmitted over an in-transit services (e.g. c-bridge, gateway, Proxy) those are capable of receiving message transmitted from one c-space, transforming the received message into format of second c-space, and publish the transformed message to the second c-space: Stewart, figure 22, items 424, 426, 428; [0274]-[0276]; [0233]; [0140]).

However, Stewart does not explicitly disclose the determining being based on an evaluation of two or more routing scripts selected from the group consisting of: a routing script defined by a sending service, a routing script defined by a recipient service, and one or more routing scripts defined by one or more in-transit services, such that each service is capable of independently affecting said determining of said route path during a logical routing of said message represented by said evaluation.

In analogous art, Johnson discloses each system user/caller is authorized to access an administration workstation to generate routing script which includes routing instructions. The routing engine then determines an appropriate destination for call service based upon evaluating the user-generated routing scripts (Johnson, abstract; column 1, line 4, 63-67; column 2, lines 26-47; column 3, lines 45-52; column 5, lines 1-27).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Johnson's ideas of determining an appropriate destination for a

call service based upon evaluating user-generated routing scripts into Stewart's system in order to provide an efficient message routing control system (e.g. increasing flexibilities by providing users ability of modifying routing scripts; decreasing time consuming), see (Johnson, column 2, lines 49-60).

**Regarding claim 52:**

Stewart discloses the invention substantially as claimed, including a method, which can be implemented in a computer hardware or software code for routing messages from one or more sending services to one or more recipient services across a message interchange network, comprising:

receiving a registration request from a service for inclusion in a message routing network, said message routing network being built on an open platform overlaying a public network, said service being operative to provide a data operation according to prosperities and permissions associated with said services: (Stewart discloses an open collaborative commerce platform for dynamic business-to-business collaborations, therefrom messages are communicated between trading partners (abstract, lines 7-14; [0024]; [0030]; [0060]; [0084]). In Stewart's system, the business participants are requested to make registration, and they are assigned participant roles and security policies (abstract, lines 7-14; figure 20; [0025]; [0027]; [0030])).

including said service in directory of services, said directory of services enabling users of said message routing network to define at least a portion of a desired data processing on a message: (Stewart system allows each individual participant to define, implement private business processes locally: [0006]; [0080]-[0081]).

determining a route path for delivery of a message to one or more recipient services; said route path including one or more of the in-transit services: (the collaboration spaces (c-space) are created by c-space owners (e.g. message sender/message receiver). The created c-space is capable of receiving and sending message between communication participants (Stewart, [0025]-[0027]; [0030]); where ("c-space" reads on 'in-transit service' as claimed).

However, Stewart does not explicitly disclose the determining being based on an evaluation of two or more routing scripts selected from the group consisting of: a routing script defined by a sending service, a routing script defined by a recipient service, and one or more routing scripts defined by one or more in-transit services, such that each service is capable of independently affecting said determining of said route path during a logical routing of said message represented by said evaluation.

In analogous art, Johnson discloses each system user/caller is authorized to access an administration workstation to generate routing script which includes routing instructions. The routing engine then determines an appropriate destination for call service based upon evaluating the user-generated routing scripts (Johnson, abstract; column 1, line 4, 63-67; column 2, lines 26-47; column 3, lines 45-52; column 5, lines 1-27).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Johnson's ideas of determining an appropriate destination for a call service based upon evaluating user-generated routing scripts into Stewart's system in order to provide an efficient message routing control system (e.g. increasing flexibilities by providing users ability of modifying routing scripts; decreasing time consuming), see (Johnson, column 2, lines 49-60).

**Regarding claims 53 and 67:**

In addition to rejection in claims 52 and 64, Stewart-Johnson further discloses data transformation service: (all messages communicated between trading partners would be transmitted over an in-transit services (e.g. c-bridge, gateway, Proxy) those are capable of receiving message transmitted from one c-space, transforming the received message into format of second c-space, and publish the transformed message to the second c-space: Stewart, figure 22, items 424, 426, 428; [0274]-[0276]; [0233]; [0140]).

**Regarding claims 54, 68:**

In addition to rejection in claims 52 and 64, Stewart-Johnson further discloses enrichment service: (the created c-space is capable of receiving and sending message between communication participants (Stewart, [0025]-[0027]; [0030]). In Stewart's system, selecting c-space for communication between participants based upon business protocol of incoming message: Stewart, [0098]).

**Regarding claims 55 and 69:**

In addition to rejection in claims 52 and 64, Stewart-Johnson further discloses a cross-reference service: (Johnson: abstract; column 4, lines 60-67; column 5, lines 1-27).

**Regarding claim 74:**

In addition to rejection in claim 64, Stewart-Johnson further discloses selecting directory of service by in-transit service: (Johnson: abstract; column 4, lines 60-67; column 5, lines 1-27).

**Regarding claim 60-62:**

Those claims are rejected under rationale of claim 52.

**Regarding claim 77:**

In addition to rejection in claim 64, Stewart-Johnson further discloses routing script maps an invocations of first service to an invocation of second service, wherein contexts of said invocations are managed by said message routing network: (Stewart, 0024); [0060]).

**Regarding claim 78:**

In addition to rejection in claim 64, Stewart-Johnson further discloses script defines a procedure for enabling determination of at least part of a routing message between services: (Johnson, abstract; column 4, lines 60-67; column 5, lines 1-27).

**Regarding claim 79:**

In addition to rejection in claim 64, Stewart-Johnson further discloses routing script is defined by one of a sending service, recipient service, and an in-transit service: (Johnson, abstract; column 4, lines 60-67; column 5, lines 1-27).

**Regarding claims 66 and 76:**

Those claims are rejected under rationale of claim 64.

**Regarding claim 75:**

In addition to rejection in claim 64, Stewart-Johnson further discloses the simple object access protocol (SOAP): (Stewart discloses communications can be implemented over SOAP: [0338]).

**Regarding claim 65:**

Stewart-Johnson discloses a method as discuss in claim 64, which transport level message service: (Stewart: [0061]).

**Regarding claim 63:**

Stewart discloses the invention substantially as claimed, including a computer program product, stored on a machine-readable medium, comprising instructions operable to cause a computer to:

receiving a registration request from a service for inclusion in a message routing network, said message routing network being built on an open platform overlaying a public network, said service being operative to provide a data operation according to prosperities and permissions associated with said services; (Stewart discloses an open collaborative commerce platform for dynamic business-to-business collaborations, therefrom messages are communicated between trading partners (abstract, lines 7-14; [0024]; [0030]; [0060]; [0084]). In Stewart's system, the business participants are requested to make registration, and they are assigned participant roles and security policies (abstract, lines 7-14; figure 20; [0025]; [0027]; [0030])).

including said service in directory of services, said directory of services enabling users of said message routing network to define at least a portion of a desired data processing on a message; (Stewart system allows each individual participant to define, implement private business processes locally: [0006]; [0080]-[0081]).

determining a route path for delivery of a message to one or more recipient services; said route path including one or more of the in-transit services: (the collaboration spaces (c-space) are created by c-space owners (e.g. message sender/message receiver). The created c-space is capable of receiving and sending message between communication participants (Stewart, [0025]-[0027]; [0030]); where ("c-space" reads on 'in-transit service' as claimed).

However, Stewart does not explicitly disclose the determining being based on an evaluation of two or more routing scripts selected from the group consisting of: a routing script

defined by a sending service, a routing script defined by a recipient service, and one or more routing scripts defined by one or more in-transit services, such that each service is capable of independently affecting said determining of said route path during a logical routing of said message represented by said evaluation.

In analogous art, Johnson discloses each system user/caller is authorized to access an administration workstation to generate routing script which includes routing instructions. The routing engine then determines an appropriate destination for call service based upon evaluating the user-generated routing scripts (Johnson, abstract; column 1, line 4, 63-67; column 2, lines 26-47; column 3, lines 45-52; column 5, lines 1-27).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Johnson's ideas of determining an appropriate destination for a call service based upon evaluating user-generated routing scripts into Stewart's system in order to provide an efficient message routing control system (e.g. increasing flexibilities by providing users ability of modifying routing scripts; decreasing time consuming), see (Johnson, column 2, lines 49-60).

**Regarding claim 64:**

Stewart discloses the invention substantially as claimed, including a system, which can be implemented in a computer hardware or software code for routing messages from one or more sending services to one or more recipient services across a message interchange network, comprising:

a message routing network having an interface that enables a plurality of services to post messages and to receive messages from said message routing network: (Stewart discloses a

message routing mechanism including collaboration space that supports for business communications between business participants (e.g. sending and receiving messages between business participants): abstract, lines 7-14; figure 20; [0025]; [0027]; [0030]).

message routing being built on an open platform overlaying a public network: (Stewart clearly discloses his system can be an open platform supports collaboration communications between business participants: [0024]; [0060]).

at least some of the one or more sending service and the one or more recipient services are managed by different organizational entities; wherein each sending service and recipient service is accessible according to prosperities and permissions associated with each of the sending service and recipient services: (in Stewart's system, the business participants are requested to make registrations, and they are assigned participant roles and security policies: abstract, lines 7-14; figure 20; [0025]; [0027]; [0030]).

at least portion of said plurality of services providing a menu of data operations that can be selectively applied to a message traversing said message routing network: ("template" which reads on 'a menu of data operations' as claimed: Stewart, [0061]; [0165]).

a route path defining delivery of a message to said one or more recipient services, said route path including one or more in-transit services: (the collaboration spaces (c-space) are created by c-space owners (e.g. message sender/message receiver). The created c-space is capable of receiving and sending message between communication participants (Stewart, [0025]-[0027]; [0030]); where ("c-space" reads on 'in-transit service' as claimed).

However, Stewart does not explicitly disclose route path determined based on an evaluation of two or more routing scripts selected from the group consisting of: a routing script



defined by a sending service, a routing script defined by a recipient service, and one or more routing scripts defined by one or more in-transit services, such that each service is capable of independently affecting said determining of said route path during a logical routing of said message represented by said evaluation.

In analogous art, Johnson discloses each system user/caller is authorized to access an administration workstation to generate routing script which includes routing instructions. The routing engine then determines an appropriate destination for call service based upon evaluating the user-generated routing scripts (Johnson, abstract; column 1, line 4, 63-67; column 2, lines 26-47; column 3, lines 45-52; column 5, lines 1-27).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Johnson's ideas of determining an appropriate destination for a call service based upon evaluating user-generated routing scripts into Stewart's system in order to provide an efficient message routing control system (e.g. increasing flexibilities by providing users ability of modifying routing scripts; decreasing time consuming), see (Johnson, column 2, lines 49-60).

**Regarding claim 84:**

Stewart discloses the invention substantially as claimed, including a method for routing messages from one or more sending services to one or more recipient services across a message interchange network, said message interchange network being built on an open platform overlaying a public network, the method comprising:

receiving a message from a sending service, said message including a header and at least one of a body and an attachment, and wherein one or more of said body and said attachment

includes one or more documents if said sending service is sending one or more documents to said sending service: (Stewart discloses an open collaborative commerce platform for dynamic business-to-business collaborations, therefrom messages are communicated between trading partners. Although Stewart does not explicitly disclose message header, message body, however those are inherently included in the communication message: abstract, lines 7-14; [0030]; [0060]; [0084]).

determining a route path for delivery of said message to at least one of recipient service: (in order to be able to communicate message between communication participants, at least one route path for communications between trading participants should be determined prior message delivered from sending service to recipient service: Stewart, [0025]-[0027]; [0030]).

said service may be managed by different organizational entities: (the message routing mechanism including collaboration space that supports for business communications between business participants (e.g. sending and receiving messages between business participants): abstract, lines 7-14; figure 20; [0025]; [0027]; [0030]).

sending services, recipient services and in-transit service that may coupled at least one of message interchange network and one or more other in-transit services: (Stewart discloses a network comprises sending services, receiving services, c-hub, c-spaces those coupled to each others: figure 5, items 134, 136, 138, 154, 156) where (“c-hub” reads on ‘message interchange network’ as claimed; “c-space” reads on ‘in-transit service’ as claimed).

delivering said message to one or more of said in-transit services, wherein one or more of said in-transit service conduct independent processing of said message as said message travels from sending service to a recipient service, the independent processing being selected from a

group including data transformation, content modifying, filtering and service utilization tracking: (the collaboration spaces (c-space) are created by c-space owners (e.g. message sender/message receiver). The created c-space is capable of receiving and sending message between communication participants (Stewart, [0025]-[0027]; [0030]). In Stewart's system, selecting c-space for communication between participant based upon business protocol of incoming message: Stewart, [0098]); where ("c-space" reads on 'in-transit service' as claimed).

However, Stewart does not explicitly disclose the determining including evaluating at least one explicit route path and one or more routing scripts, the routing scripts being at least optionally provided by one or more of services selected from the group consisting of: said sending services, said recipient services, and in-transit services, wherein each service is capable of independently affecting said determining of said route path during a logical routing of said message represented by said evaluation.

In analogous art, Johnson discloses each system user/caller is authorized to access an administration workstation to generate routing script which includes routing instructions. The routing engine then determines an appropriate destination for call service based upon evaluating the user-generated routing scripts (Johnson, abstract; column 1, line 4, 63-67; column 2, lines 26-47; column 3, lines 45-52; column 5, lines 1-27).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Johnson's ideas of determining an appropriate destination for a call service based upon evaluating user-generated routing scripts into Stewart's system in order to provide an efficient message routing control system (e.g. increasing flexibilities by providing

users ability of modifying routing scripts; decreasing time consuming), see (Johnson, column 2, lines 49-60).

**Regarding claim 85:**

In addition to rejection in claim 84, Stewart-Johnson further discloses at least two in-transit services, and wherein two or more said in-transit services are managed by different organizational entities: (the collaboration spaces (c-space) are created by c-space owners (e.g. message sender/message receiver). The created c-space is capable of receiving and sending message between communication participants (Stewart, [0025]-[0027]; [0030])).

**Claims 10, 35-36, 56, 58-59, 70 and 72-73 are rejected under 35 U.S.C 103(a) as being un-patentable over Stewart-Johnson in view of Owens et al. (U.S. 6,633,630).**

**Regarding claim 10:**

Stewart-Johnson discloses the invention substantially as disclosed in claim 1, but does not explicitly teach receiving includes receiving said message from a party that sends said message on behalf of a sender.

In analogous art, Owens discloses method of sending message in according to sender preferences, see (Owens: abstract).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Owens's ideas of sending and receiving a messages accordance with preferences of sender and recipients into Stewart-Johnson's system in order to provide flexibilities and convenient for communication system users, see (Owens: column 2, lines 9-19).

**Regarding claims 35-36, 58 and 72:**

Those claims are rejected under rationales of claim 10.

**Regarding claims 59 and 73:**

Stewart-Johnson discloses the invention substantially as disclosed in claims 52 and 64, but does not explicitly teach selecting directory of service by recipient service.

In analogous art, Owens discloses method of sending message in according to sender preferences, see (Owens: abstract).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Owens's ideas of sending and receiving a messages accordance with preferences of sender and recipients into Stewart-Johnson's system in order to provide flexibilities and convenient for communication system users, see (Owens: column 2, lines 9-19).

**Regarding claims 56 and 70:**

Stewart-Johnson discloses the invention substantially as disclosed in claims 52 and 64, but does not explicitly teach filtering service.

This limitation is taught by Owens, see (Owens, abstract).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Owens's ideas of filtering a messages accordance with preferences of sender and recipients into Stewart-Johnson's system in order to provide flexibilities and convenient for communication system users, see (Owens: column 2, lines 9-19).

**Claims 26 and 48 are rejected under 35 U.S.C 103(a) as being un-patentable over Stewart-Johnson in view of Ghoneimy et al. (US 2004/0078373).**

**Regarding claim 26:**

Stewart-Johnson discloses the invention substantially as disclosed in claim 25, but does not explicitly teach conditions are combined using one or more of an AND, OR, XOR, and NOT operator.

In analogous art, Ghoneimy discloses conditions are using is one or more of AND, OR, XOR, and NOT operators, see ([0091]).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Ghoneimy's ideas of using one or more of AND, OR, XOR, and NOT operators into Stewart-Johnson's system in order to save development time and resources by employ well-know technique (e.g. conditions of and, or, xor ....etc) into Owens-Johnson's system.

**Regarding claim 48:**

Stewart-Johnson discloses the invention substantially as disclosed in claim 47, but does not explicitly teach conditions are combined using one or more of an AND, OR, XOR, and NOT operator.

In analogous art, Ghoneimy discloses conditions are using one or more of AND, OR, XOR, and NOT operators ([0091]).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Ghoneimy's ideas of using one or more of AND, OR, XOR, and NOT operators into Stewart-Johnson's system in order to save development time and resources by employ well-know technique (e.g. conditions of and, or, xor ....etc) into Owens-Johnson's system.

**Claim 30 is rejected under 35 U.S.C 103(a) as being un-patentable over Stewart-Johnson in view of Koperda et al. (US 6,230,203).**

**Regarding claim 30:**

Stewart-Johnson discloses the invention substantially as disclosed in claim1, but does not explicitly comprising logging usage status and billing information after processing said message.

In analogous art, Koperda discloses method of billing customer based on usages status, see (abstract).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Koperda's ideas of billing customer based on usages into Stewart-Johnson's system in order to increase benefits for both services providers and services consumers, see (Koperda: column 3, lines 14-25, lines 62-67).

**Claims 57 and 71 are rejected under 35 U.S.C 103(a) as being un-patentable over Stewart-Johnson in view of Heuring (U.S. 6,965,878).**

**Regarding claim 57 and 71:**

Stewart-Johnson discloses the invention substantially as disclosed in claims 52 and 64, but does not explicitly teach a credit scoring service.

In analogous art, Heuring discloses credit scoring system for business-to-business transaction: (abstract).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Heuring's ideas of credit scoring with Stewart-Johnson's system in order to provide an efficient business communication network, see (Heuring: column 1, lines 10-15).

## **Conclusions**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAN-DAI THI TRUONG whose telephone number is (571)272-7959. The examiner can normally be reached on Monday- Friday from 8:30am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

01/02/2008.

/Kenny S Lin/

Primary Examiner, Art Unit 2452



